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**FRUIT INSECTS
SECTION**

Cooperative **ECONOMIC INSECT REPORT**

Issued by

PLANT PEST CONTROL BRANCH

AGRICULTURAL RESEARCH SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE



AGRICULTURAL RESEARCH SERVICE

PLANT PEST CONTROL BRANCH

ECONOMIC INSECT SURVEY SECTION

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Branch serves as a clearing house and does not assume responsibility for accuracy of the material.

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Economic Insect Survey Section
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United States Department of Agriculture
Washington 25, D. C.

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

ARMYWORM outbreaks in areas of Louisiana, Alabama, Georgia, Tennessee, South and North Carolina. Economic infestations appearing in southern Missouri. Moth flights in Kansas, Illinois, Delaware and other areas. (pages 375, 395). Also see LIGHT TRAP COLLECTIONS. (page 392).

EUROPEAN CORN BORER mortality 19 percent in Minnesota. (page 376).

GRASSHOPPERS hatching in Arkansas, Missouri, Kansas and New Mexico. Threatening populations in southern Clark County, Kansas. Numbers appear above normal for time of year in Arkansas. (page 377).

CUTWORMS causing damage over wide areas of Alabama, Kentucky, Tennessee and Missouri. Several other states also report damage. (pages 377, 384).

ALFALFA WEEVIL continues to spread in Virginia; now found in several southernmost counties. (page 395). Heavy damage in Maryland and Delaware. (page 380).

COLORADO POTATO BEETLE unusually abundant in Alabama and moderate at Charleston, South Carolina. Also active in Delaware and Virginia. (pages 386, 395).

VEGETABLE WEEVIL damaging crucifers in Alabama and Mississippi. Infesting tobacco in areas of North and South Carolina. (page 385).

THRIPS light to medium on cotton in several Texas counties. Appearing on seedling cotton in Mississippi and Louisiana. (page 389).

Status of HALL SCALE in the United States. (page 382).

Request for COTTON STEM MOTH survey. (page 396).

NOTES received too late for inclusion in the body of this issue. (p. 395).

First reported records of season. (Page 395).

Reports in this issue are for the week ending April 29, 1955 unless otherwise designated.

WEATHER BUREAU'S 30-DAY OUTLOOK
May 1955

The Weather Bureau's 30-day outlook for May calls for temperatures to average below seasonal normals west of the Continental Divide, along the Atlantic Seaboard, and in the Northern Plains. Above normal temperatures are predicted over the remainder of the nation with greatest departures over Texas and adjacent states.

Precipitation is expected to exceed normal over most of the northern third of the nation. Subnormal amounts are anticipated over the Southern Plains and in the Southeast. In areas not specified near normal rains are in prospect.

This report released by the Weather Bureau on April 29, 1955.

Weather forecast given here is based on the official 30-day "Resume and Outlook", published twice a month by the Weather Bureau. You can subscribe through Superintendent of Documents, Washington 25, D. C. Price: \$4.80 a year, \$2.40 for six months.

WEATHER FOR THE WEEK ENDING MAY 2, 1955

The week was unusually cool west of the Continental Divide, in the Ohio Valley and along the Atlantic Coast, and abnormally warm in the Mississippi Valley and Great Plains. General precipitation occurred in the Northwest and along the Pacific Coast at the beginning and end of the period, scattered showers fell in the Mississippi Valley about mid-period, and over the Northeast during the first 4 days of the period, while the week was warm and sunny in most of the South. West of the Continental Divide temperatures for the week averaged from 6° to 12° below normal. Subfreezing minima overspread all of this area except extreme southern portions on the 27th when a low of 31° was recorded at Fresno, Calif., and minima of 28°, 32° and 37° were at record low levels for so late in the season at Medford, Oreg., Red Bluff, and Bakersfield, Calif., respectively. Some snow fell over the northern Rockies and northern portions of the Great Basin on the 26th; Salt Lake City, Utah reported 5 inches. The past month has been one of the coldest Aprils on record in the Pacific Northwest.
(Weather continued on page 396).

CEREAL AND FORAGE INSECTS

ARMYWORM (*Pseudaletia unipuncta*) - LOUISIANA - Infestation becoming very severe in oat fields where soil completely shaded. Up to 22 per square foot in several fields in Madison Parish. Twelve to 16 per square foot in two large oat fields in Red River Parish. Three to 5 per square foot in 10 parishes in northern part of State, with occasional armyworm found in oats and barley in several other parishes. (Oliver). ARKANSAS - Remains relatively low in east central area. Light infestation in grain in Prairie, St. Francis, Cross and Poinsett Counties. Larvae in third instar or above indicating recently-deposited eggs from heavy moth flights not yet hatching. Heavy flights in northeastern counties during last two weeks. (Warren). ALABAMA - Reports of outbreaks continue from parts of western and northern Alabama. Specific information on damaging numbers in Perry, Dallas, Lowndes, Montgomery, Greene, and Limestone Counties. (Arant). GEORGIA - Severe damage to oats in Sumter and Houston Counties. Some fields completely destroyed before damage noted. (Jordan). TENNESSEE - Reports indicate armyworm occurring in outbreak numbers in middle Tennessee May 2. Larvae small. (Stanley, Telegraphic Report). NORTH CAROLINA - Infesting oats and fescue in Carteret County, 200 larvae per square yard in some areas, with oats destroyed and fescue cut back severely. (Weisman). DELAWARE - Numerous moths, including gravid females, in flight at Newark April 21. (Milliron). ILLINOIS - Flight moderate in eastern area, occasional moth in northern counties. One larval infestation in extreme southern Illinois. Total of 153 moths collected in light trap in eastern area April 23. (Petty et al). MISSOURI - Economic infestations of first and second instars appearing in rank small grains in southeast and southwest corners of State. Moderate moth flight continues over State. (Kyd, Thomas). KANSAS - Moths in fields of barley and wheat in central counties. Also light to moderate flights at lights in this area. No spring-generation larvae observed. (Matthew).

The following may be of interest as a comparison with armyworm infestation for the same period during past two years: 1954 - Armyworm was serious and widespread over Tennessee; seriously infesting grains at Stoneville, Mississippi; extremely severe in upper Mississippi delta of Louisiana, and heavy, 6-50 per square foot, in some areas of Arkansas. The infestation was general and widespread in southern Missouri and small larvae were appearing in southern Illinois. 1953 - Large numbers of moths were active in middle and west Tennessee, central Ohio, southern Indiana and in Illinois. Moths were also active in Delaware and a few small larvae were appearing in grain in middle Tennessee.

EUROPEAN CORN BORER (Pyrausta nubilalis) - ILLINOIS - Casual observations show 10 percent pupation at Carbondale. (Petty et al). MINNESOTA - Recent mortality survey in 28 counties in southern two-thirds of State showed average of 19 percent of borers examined were dead. This compares with 25 percent mortality in spring of 1954 and 20 percent in 1953. Mortality by State crop reporting districts is as follows: southwest 29 percent, south central 28, southeast 13, west central 8, central 15, east central 28. The surviving borers appear in very good condition and there are sufficient numbers to cause damaging infestations, especially in southwest and west central districts. (Minn. Ins. Rept. Serv.).

PEA APHID (Macrosiphum pisi) - DELAWARE - Very abundant on alfalfa and clovers. Increasing in New Castle County. (Milliron). PENNSYLVANIA - Abundant in some alfalfa fields in southern area. (Pepper). NORTH CAROLINA - Damaging alfalfa in Yadkin County. (Smith). TENNESSEE - Very abundant in alfalfa fields (all badly injured by late frost); however, fungus diseases, lady beetles and syrphids have reduced infestations. (Mullett). LOUISIANA - Over 200 per sweep in hairy vetch and Singletary peas in Tensas Parish. (Oliver). ILLINOIS - Average population for State on alfalfa and clover is 26 per 100 sweeps, highest in northeastern area with average of 52 per 100 sweeps. (Petty et al). MISSOURI - Numerous parasites and predators and above normal temperatures have kept infestations on alfalfa along Mississippi River to minimum, from 5-21 aphids per sweep. (Kyd, Thomas). KANSAS - Beginning to increase in northern area; however, infestations still considered light and remain below 200 aphids per 25 sweeps of 15-inch net. (Matthew). Populations have increased in several local areas of southwestern counties and beginning to require control. Counts of 100-200 per sweep in a few fields. (Gates). UTAH - Appearing in some alfalfa fields in northern area. (Knowlton). MARYLAND - Infestation general on alfalfa, light to heavy from Worcester to Washington County. Fungus disease high in some fields on lower Eastern Shore and appearing in central and western areas. Many winged forms noted. (U. Md., Ent. Dept.).

LEAFHOPPERS - ILLINOIS - Three specimens of Empoasca sp. collected in northeastern area. (Petty et al). DELAWARE - Aceratagallia sanguinolenta very abundant on red clover and alfalfa in some areas. (Milliron). LOUISIANA - Five potato leafhoppers (Empoasca fabae) taken at Natchitoches, 4 at Benton on alfalfa and 1 at Alexandria on burclover April 26. (Oliver).

GREEN CLOVERWORM (Plathypena scabra) - ARKANSAS - Infestations in northwestern area continue relatively heavy on alfalfa and other legumes. One to 5 per sweep of 12-inch net. Total of 70 first-generation adults collected at light trap at Fayetteville April 28. (Warren).

GRASSHOPPERS - ARIZONA - From 50 to 100 per square yard by middle of April in spots on San Carlos Indian Reservation in Graham County. Dominant species Aulocara elliotti, Melanoplus mexicanus, and M. cuneatus. Trimerotropis pallidipennis causing concern in Scottsdale area, Maricopa County, moving into borders of irrigated crops. SOUTH DAKOTA - Eggs in southeastern counties in good condition, development normal. TEXAS - First and second instar Melanoplus differentialis in southern and south-central areas by April 18. As high as 50 per square yard in Falls, McLennan and Robertson Counties. (Grasshopper Cont. Proj.). NEW MEXICO - Beginning to hatch April 23 in lower half of State. Only non-economic species involved. (Dobson). KANSAS - Infestations, range species, building up to threatening populations in rangeland in Cimmaron River Valley, southern Clark County. From 2-10 first to third instars per square yard. Spring hatch not noticeable in central Clark County. (Gates). Melanoplus spp. now found in most fields. Spring hatch progressing as predicted from last fall's surveys. Newly-hatched nymphs in all fields surveyed in 12 central and north central counties. From 1-8 nymphs per square yard in infested fields. Eggs of M. differentialis and M. bivittatus still found in abundance, indicating hatching of these species not started. (Matthew). MINNESOTA - M. femur-rubrum showing no development but eggs of M. bivittatus in coagulated stage. (Minn. Ins. Rept. Serv.). MISSOURI - M. femur-rubrum, M. mexicanus and M. bivittatus hatch continues slowly in southern half of State. From 1-12 per square yard in fence rows and field margins and 0-6 per square yard in pastures and alfalfa. Hatch of 5-10 percent of M. bivittatus eggs occurred in west central area during week. (Kyd, Thomas). ARKANSAS - Hatching of Melanoplus sp. well underway over State. (Warren). Began first week in April in south Arkansas. First and second instars in alfalfa and other forage crops in northwestern area. Numbers appear above normal for time of year. (Warren).

CUTWORMS - FLORIDA - Some heavy infestation of black cutworm (Agrotis ypsilon) and granulate cutworm (Feltia subterranea) in Everglades area, about 13 cutworms per square yard in one weedy field. (Genung, Questel). ALABAMA - Granulate cutworm reported from many sections. Damage to cotton, corn, peanuts, vegetables and other plants. (Arant). KENTUCKY - Clay-backed cutworm has been especially destructive to small grains, lespedeza, clover and alfalfa in western and south central areas. In some fields as many as 40 per square yard. (Price). GEORGIA - Moderate infestation on young peanuts following small grain stubble in Seminole County. (McGill). TENNESSEE - Feltia spp. still doing damage in scattered pasture fields over most of State. (Mullett). OHIO - Moths common in light traps at Athens. (Stehr). MISSOURI - Feltia subgothica and A. gladiaria larvae largely in last instar and damage increasing on alfalfa, clovers and pastures. Early-planted corn heavily damaged in fields where vegetation plowed under. Counts

from 0-2 per square foot in legumes and 0-3 per yard of corn row. Parasitism, mainly by Apanteles sp., from 5 to 20 percent. Light numbers of small larvae of A. ypsilon in extreme southeast; light moth flight continues over much of State. From 0-2 Peridroma margaritosa larvae per square foot in alfalfa in southern third of State. From 0-1 bronzed cutworm, nearly mature, per square yard in pastures and other grassy areas in southwest. (Kyd, Thomas). MICHIGAN - Cutworms abundant at Paw Paw. (Hutson). NEW MEXICO - Large numbers of moths in flight. (Dobson, Apr. 23). UTAH - Severely damaging alfalfa in Millard County. (Rickenbach, Knowlton). CALIFORNIA - Glassy cutworm (Crymodes devastator) found severely injuring Merion blue grass in mountainous area of Kern County and in Yolo County. Damage by this species rare in California. (Cal. Coop. Ins. Rept. Apr. 22.).

AN ARMYWORM (Leucania latiuscula) - FLORIDA - Considerable numbers on grasses at Belle Glade. Many parasitized and diseased. (Genung, Questel).

ARMY CUTWORM (Chorizagrotis auxiliaris) - UTAH - Severe injury in Promontory area of Box Elder County. (Allred).

CORN EARWORM (Heliothis armigera) - FLORIDA - Two larvae per ear on sweet corn at Vero Beach. (Burnett). LOUISIANA - Larvae per 100 sweeps in crimson clover: 27 in Lincoln Parish, 11 in Claiborne Parish and 42 in Natchitoches Parish. Three to 5 in white clover in Acadia Parish. (Oliver). ARKANSAS - Light in alfalfa. Larvae all sizes. (Warren).

SOUTHWESTERN CORN BORER (Diatraea grandiosella) - OKLAHOMA - Pupation of overwintered borers as follows: Payne County 7 percent, Pontotoc County 14 percent, Tulsa County 4 percent. Pupation also noted in Choctaw and Creek Counties. (Arbuthnot).

FALL ARMYWORM (Laphygma frugiperla) - FLORIDA - Spotty infestations on corn in Everglades area. (Genung, Questel).

A WEBWORM (probably Nomophila noctuella) - MISSOURI - Half to full-grown larvae migrating into margins of spring oats and causing moderate to heavy damage in southwest area. (Kyd, Thomas).

SUGARCANE BORER (Diatraea saccharalis) - LOUISIANA - Beginning to show increased activity in some varieties of sugarcane. Four egg masses found per man hour and 22 stalks per 200 feet of row showing feeding in Assumption and Iberville Parishes. Two to 4 stalks per 200 feet showing feeding in West Baton Rouge Parish. (Oliver).

A SEED-CORN BEETLE (Agonoderus comma) - MINNESOTA - Large numbers of adults on warm days since April 10 in Twin Cities area. (Minn. Ins. Rept. Serv.).

SUGARCANE BEETLE (Euetheola rugiceps) - LOUISIANA - Three to 6 stalks showing feeding per 200 feet of row in St. Mary, Assumption, and Iberville Parishes. (Oliver). MISSISSIPPI - Damaging corn on several farms in Webster County. Specimens from Scott County. (Hutchins). ALABAMA - Adults attacking corn in Baldwin County. (Zimmer). NORTH CAROLINA - Four percent of corn plants wilted from activity in Hyde County. (Weisman). Adults numerous in light trap in Duplin County. (Mitchell).

TWO-SPOTTED SPIDER MITE (Tetranychus bimaculatus) - CALIFORNIA - Very numerous on lower leaves of sweet corn in Orange County fields. (Campbell).

SEED-CORN MAGGOT (Hylemya cilicrura) - MISSOURI - Heavy damage to germinating corn and garden seeds in scattered localities over southern half of State. (Kyd, Thomas).

FALSE WIREWORMS (Eleodes spp.) - KANSAS - From 1-5 larvae per square foot in wheat and 1-9 larvae per square yard in corn land. Nearly all larvae full grown. (Matthew).

CHINCH BUG (Blissus leucopterus) - MISSISSIPPI - Infesting corn plants in Webster County. (Hutchins). NORTH CAROLINA - Heavy local infestation in wheat in Pender County. (Honeycutt). Adults in flight in Raleigh. (Jones). ILLINOIS - Flying generally throughout eastern area but have not become established in grain fields. (Petty et al). MISSOURI - Scattered heavy infestations, up to 22 per foot of drill row, in scattered fields of small grains in west central area. (Kyd, Thomas).

CORN ROOT WEBWORM (Crambus caliginosellus) - MISSISSIPPI - Adults swarming at lights in Forrest County. (Broome).

CORN FLEA BEETLE (Chaetocnema pulicaria) - NEW JERSEY - Noted on sweet corn in Burlington County April 23. (Merrill). ILLINOIS - Fifteen adults per 100 sweeps in bluegrass beside old corn fields in northeastern area, 19 per 100 in eastern area. (Petty et al).

GREEN JUNE BEETLE (Cotinis nitida) - FLORIDA - Two to 6 larvae per square foot damaging grass at Gainesville. (Kerr).

GREENBUG (Toxoptera graminum) - TEXAS - Light to medium widespread on wheat in Swisher, Deaf Smith and Castro Counties. Population has declined considerably in last two weeks. Hardly any in Swisher County, 50-300 still in spots in Deaf Smith and Castro Counties. (Daniels). KANSAS - Found in one field in southern Marshall County. Three aphids per 25 sweeps. (Matthew).

ENGLISH GRAIN APHID (Macrosiphum granarium) - KANSAS - Non-economic infestation found in 12 counties in north central area. From 5-12 aphids per 25 sweeps of 15-inch net in wheat and barley. (Matthew).

APHIDS - ARIZONA - Heavy infestation in wheat and other small grains in Casa Grande area, controls applied. (Ariz. Coop. Rept.). TEXAS - Medium to heavy widespread infestations of Aphis sp. on grain sorghum in Nueces County. (Cooper).

YELLOW SUGARCANE APHID (Sipha flava) - FLORIDA - Lower population in cane than a year ago at Belle Glade; only a few fields show infestation. (Genung, Questel).

ALFALFA WEEVIL (Hypera postica) - DELAWARE - Widespread moderately severe to very heavy at Middletown. Very heavy some fields between Smyrna and Bridgeville. (Milliron). PENNSYLVANIA - Adults fairly abundant in southern Franklin County. Adults and larvae in Delaware and Chester Counties. (Pepper, Menusan). UTAH - Moderately numerous throughout Box Elder County. (Knowlton, Allred). MARYLAND - From 1-15 adults per 10 sweeps in 11 fields in Frederick County. Most larvae small but damage beginning in this area. In southern Maryland and Eastern Shore damage to most unsprayed fields is heavy. From 4-20 adults per 10 sweeps and 3-17 larvae per sweep in Talbot and Worcester Counties. (U. Md., Ent. Dept.).

CLOVER LEAF WEEVIL (Hypera punctata) - ILLINOIS - Population continues to decrease, primarily due to fungus disease. Highest population, 17 per square foot, in red clover in northeastern area. Cocoon formation in central, eastern and northwestern areas. In general, forage crops growing away from the damage. (Petty et al). MISSOURI - Economic infestations now only in a few fields of alfalfa and red clover in central area. Fifty to 70 percent mortality from fungus and 5-10 percent pupation. (Kyd, Thomas). KANSAS - Light in red clover in Jackson and Nemaha Counties, 1-5 larvae per crown in infested fields. Few larvae appear infected with fungus. (Matthew).

CLOVER WEEVILS (Sitona sp.) - ILLINOIS - From 0-120 adults per 100 sweeps over State, highest in eastern area where 41 per 100 sweeps were found. (Petty et al).

LESSER CLOVER LEAF WEEVIL (Hypera nigrirostris) - DELAWARE - Damaging red clover throughout the State. (Milliron). PENNSYLVANIA - General in southeastern area on legume hay. (Menusan). Adults abundant and mating in Warren County. (Adams). ILLINOIS - Average of 18 percent of stems infested over state, high of 28 percent in west-southwest and 25 percent in eastern area. (Petty et al).

SWEETCLOVER WEEVIL (Sitona cylindricollis) - DELAWARE - Adults common and injurious to sweetclover at Harrington and Greenwood. (Milliron).

BEANLEAF BEETLE (Cerotoma trifurcata) - ILLINOIS - Adults in clover and alfalfa in southern half of State, 8 per 100 sweeps in eastern area. (Petty et al).

CLOVER-ROOT CURCULIO (Sitona hispidula) - KANSAS - Light infestation, 1-3 per 25 sweeps of 15-inch net, in nearly all alfalfa in central and northern Kansas. (Matthew). MARYLAND - Adults numerous in alfalfa and clover over most of State. (U. Md., Ent. Dept.).

LESSER CORNSTALK BORER (Elasmopalpus lignosellus) - FLORIDA - Fairly high population at Belle Glade. Some fields of young sugarcane have 50 percent or more shoots showing dead hearts. Moths numerous. (Genung, Questel).

MEADOW SPITTLEBUG (Philaenus leucophthalmus) - DELAWARE - Conspicuous on alfalfa in Kent County, but weather has retarded development generally. (Milliron). MARYLAND - Remains generally light on alfalfa and clover in central and southern Maryland and lower Eastern Shore. Infestations heavy, from 2-42 nymphs per 10 stems, in Frederick and Washington Counties. * MICHIGAN - Abundant at Paw Paw and Benton Harbor. (Hutson). NEW YORK - First nymphs of season in Cayuga County April 26, Wayne County April 27. (Wkly. News Lett.).

APHID

YELLOW CLOVER (Myzocallis trifolii) - OKLAHOMA - Infestation very heavy in north central area, April 30. (Bryan). Most alfalfa fields in Grady and Stephens Counties heavily infested April 16. Some fields in Grady County need replanting. (Stiles). Killing some alfalfa stands in Johnston County April 16. Also heavy in northern Marshall County. (Bower). TEXAS - Heavy widespread infestation on alfalfa in El Paso County. Considerable damage. (O'Donnell). ARIZONA - Still increasing on alfalfa in all southern areas. Difficulty in control causing concern in some areas. Reported from Wickieup, Mohave County, for first time. (Ariz. Coop. Rept.).

* (U. Md., Ent. Dept.)

TARNISHED PLANT BUG (Lygus lineolaris) - LOUISIANA - Bugs per 100 sweeps in crimson clover: Claiborne Parish 209 nymphs and 47 adults, Natchitoches Parish 116 nymphs and 21 adults. (Oliver)
ILLINOIS - From 0 to 100 per 100 sweeps with highest average 49 per 100 in northwestern area. (Petty et al).

A GROUND PEARL (Margarodes meridionalis) - FLORIDA - Average 300-500 per 100 cc. of soil on centipede grass at Orlando. (Kuitert); 75 nymphs per cubic inch on centipede grass at Gainesville. (Kerr).

A LEAF ROLLER (Amelia pallorana) - ILLINOIS - Average population in alfalfa for State is from 2-7 per 100 sweeps. For the past two years this insect has been found in alfalfa. (Petty et al).

FRUIT INSECTS

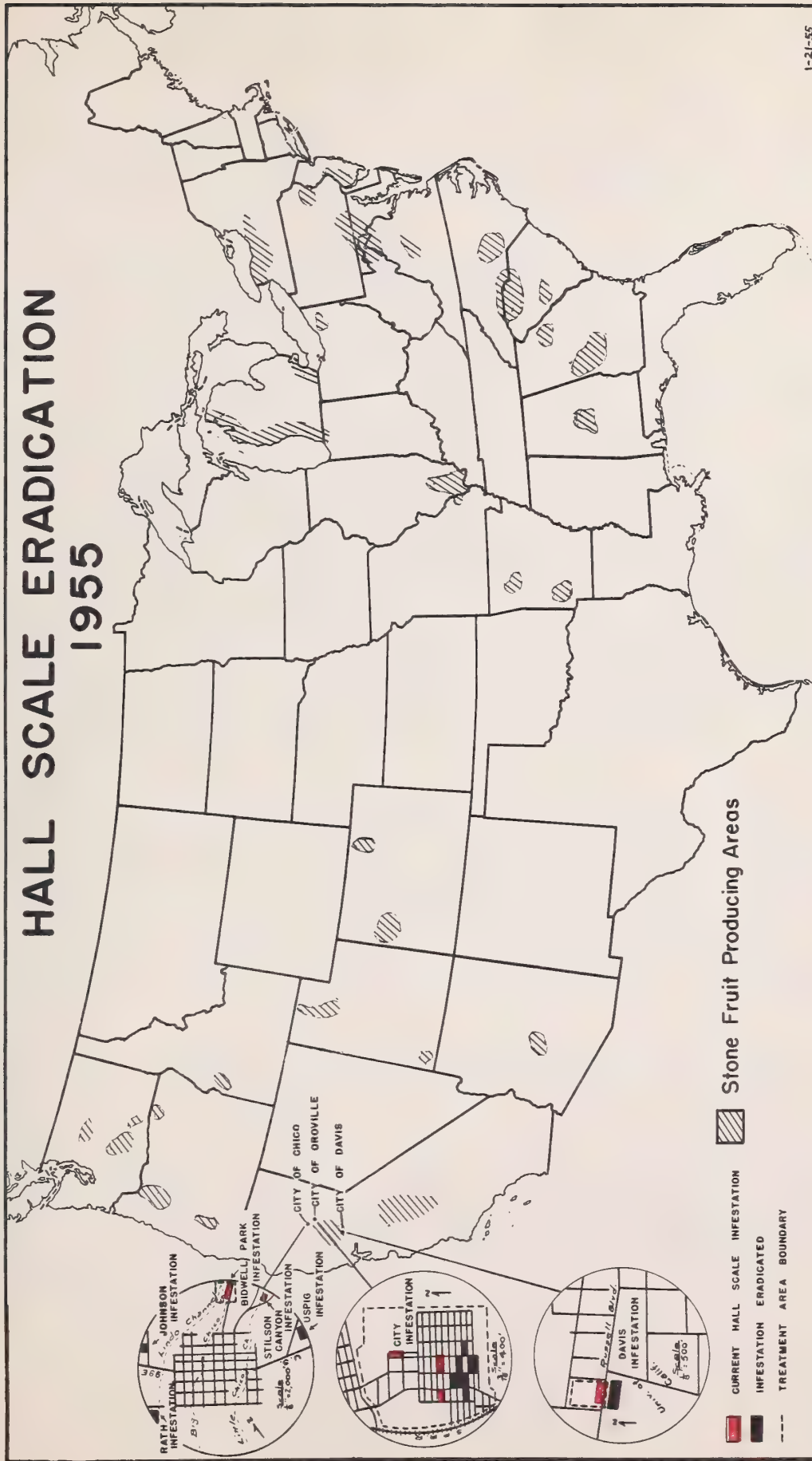
TWO-SPOTTED SPIDER MITE (Tetranychus bimaculatus) - PENNSYLVANIA - A few adults still in rough bark of apple in Adams, Franklin, and southeastern area. (Pepper, Menusan). NORTH CAROLINA - Light on apple in Alexander and Henderson Counties. Both adults and eggs present. (Turnipseed).

CODLING MOTH (Carpocapsa pomonella) - NEW YORK - Pupation under tree bands increased slightly in eastern area. (Dean). DELAWARE - First moths emerged April 20 at Woodside. (Late News). NORTH CAROLINA - First adult taken in bait pail on April 19 in Wilkes County (Turnipseed). IND. - Carryover of larvae in Vincennes area from 1954 is high and it is anticipated that first brood larval activity will be high. (Hamilton).

STATUS OF HALL SCALE IN THE UNITED STATES

Hall scale (Nilotaspis halli) was first found in North America in 1934 at the United States Plant Introduction Gardens, Chico, California. In the old world it is found commonly all over lower Egypt and throughout the Middle East. Food plants in the United States include stone fruits and one ornamental shrub (Spirea veitchii). Preferred hosts appear to be almonds and peaches. The scale attacks both the twigs and fruit. The map on the opposite page shows the distribution of this scale in the United States.

HALL SCALE ERADICATION 1955



OYSTERSHELL SCALE (Lepidosaphes ulmi) - NORTH CAROLINA - Light on apple in Henderson County. First crawling young appeared week of April 8-15. (Turnipseed).

EUROPEAN RED MITE (Metatetranychus ulmi) - NEW YORK - Newly-hatched larvae at Poughkeepsie April 27. Probably less than 1 percent of overwintering eggs had hatched. (Dean). Hatching in Orange County April 27 (Zaharchuk); in Niagara County April 30. (McNicholas). NEW JERSEY - On April 25, immature stages on apple foliage in several orchards from Burlington County southward. As many as 40-50 young mites per leaf in southern area even in orchards which had delayed dormant oils. (Merrill). PENNSYLVANIA - Overwintering eggs 50 percent hatched on apple in Adams, Franklin and Berks. (Pepper, Menusan). DELAWARE - Hatching commenced April 14. Generally, populations still light by April 28. Eggs in small numbers on apple foliage at Georgetown, April 26. (Late News). NORTH CAROLINA - A rather heavy infestation on apple in Alexander County. First eggs found April 18. (Turnipseed). INDIANA - In the Vincennes area counts made April 22 showed average of 183 mobile forms per 100 leaves and 28 eggs where dormant sprays not applied; in contrast to 14 mobile forms and 1 egg per 100 leaves where dormant spray applied. (Hamilton). CALIFORNIA - Showing in deciduous fruit orchards in Sacramento County, in some instances several mites per leaf. (Cal. Coop. Ins. Pest Rpt.)

RED-BANDED LEAF ROLLER (Argyrotaenia velutinana) - NEW YORK - In eastern area moth flight considerably reduced by weather (Dean); egg masses April 27 in Orange County (Zaharchuk); very few eggs found April 29, Dutchess County (O'Leary); adult and egg mass in Columbia County (Poray); egg masses in Onondaga County (Vuillemot). INDIANA - Eggs began hatching April 19, in Vincennes area. First brood hatch about complete. (Hamilton). PENNSYLVANIA - Eggs hatching and larvae starting to feed on apple in Adams, Franklin, Berks and southern area. (Pepper, Menusan).

APHIDS - DELAWARE - All 3 species of aphids on apple scarce to April 21. (Late News). ILLINOIS - Small numbers of Aphis pomi in Centralia area. (Chandler).

PEAR PSYLLA (Psylla pyricola) - WASHINGTON - Eggs starting to hatch in Wenatchee area, April 24. (O'Neill). OREGON - First nymphs found April 27 at Hood River. (Ellertson). NEW YORK - Nymphs found April 29 in unsprayed trees, Niagara County (McNicholas); adults out and first eggs observed April 23, many eggs found few days later in orchards near the lake, Oswego County. (Lum).

PEAR MIDGE (Contarinia pyrivora) - NEW YORK - Flies swarming in large numbers, evening of April 20, Wayne County (Small); flies abundant on April 23 in one orchard of Oswego County. (Lum).

DUSKY STINK BUG (Euschistus tristigmus) - DELAWARE - Common at Camden on peach trees. (Late News).

ORIENTAL FRUIT MOTH (Grapholitha molesta) - ILLINOIS - One emerged in cage at Villa Ridge. No wilted peach twigs as yet. (Chandler).

PLUM CURCULIO (Conotrachelus nenuphar) - DELAWARE - Very abundant; 46 collected by jarring 10 peach trees at Camden on April 25 compared with 9 on the 18th and 1 on the 11th. (Late News). - GEORGIA - First matured larvae left wild plum drops for pupation April 25, Fort Valley area. (Snapp). ILLINOIS - Apparently increasing. Egg laying cuts on apples in Villa Ridge area. (Chandler). MISSOURI - Activity noted in most sections of State. (Wkly Rept. Fr. Grow.).

MEXICAN FRUIT FLY (Anastrepha ludens) - TEXAS - In the Rio Grande Valley area 21 adults were trapped and 6 larval infestations were found April 1-15. These insects now being taken in practically all properties trapped regardless of the presence or absence of fruit. All larval infestations were considered light; however, on one property 192 infested grapefruit were found under 6 trees. (Mex. Fruit Fly Cont. Proj.

TRUCK CROP INSECTS

CUTWORMS - MASSACHUSETTS - Activity started. (Crop Pest Cont. Mess.) MARYLAND - Damaged tomatoes planted after sod in Wicomico County. (U. Md., Ent. Dept.). NORTH CAROLINA - Light infestations in tobacco plant beds in Northampton, Jones, and Onslow Counties. (Scott, Jackson). FLORIDA - Feltia probably subterranea averaging up to 35 larvae per hill of watermelons at Coleman, Sumter County. Migration apparently from lupine windbreaks. (Crall). ALABAMA - In large numbers in Monroe and Wilcox Counties. (Stanford). MISSOURI - Widespread damage to gardens in southeastern area. (Wkly. Rept. Fr. Grow.). OKLAHOMA - Numerous in truck farms, gardens and flower beds. (Bower). TEXAS - Heavy widespread on tomatoes in Shelby County. This is the heaviest attack in several years. (Wharton).

VEGETABLE WEEVIL (Listroderes costirostris obliquus) - SOUTH CAROLINA - Heavy local infestation on tobacco in Horry County. As high as 20 weevils around one newly-set plant. (Johnston). ALABAMA - Caused rather severe damage to crucifers in many areas. (Arant). In large numbers in Monroe and Wilcox Counties. (Stanford). NORTH CAROLINA - Light to moderate infestations in tobacco plant beds in Hertford, Jones, Wilson, Wayne and Onslow Counties. (Scott). MISSISSIPPI - Adults feeding on cabbage, turnips and cotton plants in Leake and Webster Counties. (Hutchins).

PEA APHID (Macrosiphum pisi) - DELAWARE - Appearing on peas in scattered areas. (Milliron). VIRGINIA - Increasing on garden peas in eastern area, and severe on alfalfa. (Brubaker, Greenwood, Hofmaster).

MEXICAN BEAN BEETLE (Epilachna varivestis) - SOUTH CAROLINA - First adults April 18 in Charleston area, 1 to 3 weeks later than in recent years. (Cuthbert, Dean).

BEAN LEAF ROLLER (Urbanus proteus) - FLORIDA - Very light populations even on untreated beans in the Everglades area. (Genung, Questel).

LESSER CORNSTALK BORER (Elasmopalpus lignosellus) - FLORIDA - Infesting lima beans in Hernando County. (Brinkley).

FLEA BEETLES - MARYLAND - On potatoes in Wicomico County. (U. of Md., Ent. Dept.). VIRGINIA - Attacking potatoes, tomatoes and cucumbers on Eastern Shore. (Brubaker, Greenwood, Hofmaster). DELAWARE - Phyllotreta cruciferae in large numbers and causing damage throughout State on young cabbage, kale and radish. (Milliron). PENN.-Phyllotreta striolata general on cabbage in southeastern area. (Menusan).

CABBAGE CATERPILLARS - NEW JERSEY - Flight of Pieris rapae continues to be heavy. Eggs common on cabbage. (Merrill). SOUTH CAROLINA - Infestations high enough to justify controls in Charleston area. Diamondback moth most prevalent. (Cuthbert, Deen).

A DARKLING BEETLE (Blapstinus sp.) - ARIZONA - Moderate damage to 60 acres of honeydew melons northeast of Mesa, April 18. (Ariz. Coop. Rept.).

CUCUMBER BEETLES - VIRGINIA - Severe on cucumbers on Eastern Shore. (Brubaker, Greenwood, Hofmaster).

SEED-CORN MAGGOT (Hylemya cilicrura) - CALIFORNIA - Infestation of squash field in Orange County, planted in trashy ground, was so severe that the field had to be replanted. Light infestations also occurred on early-planted lima beans. (Campbell).

BEET LEAFHOPPER (Circulifer tenellus) - ARIZONA - In all fields in Salt River Valley to a greater or lesser degree and some curly top symptoms beginning to appear on cantaloup. (Ariz. Coop. Rept.)

SUGAR-BEET WIREWORM (Limonius californicus) - CALIFORNIA - Populations range from 1 to 5 per foot of bean row in untreated fields in Orange County. In a field of parsnips in Los Angeles County 5 percent of roots damaged. (Campbell).

SPIDER MITES - ARIZONA - Showing up in some fields of sugar beets grown for seed in Salt River Valley, severe in spots. (Ariz. Coop. Rept.).

POTATO FLEA BEETLE (Epitrix cucumeris) - DELAWARE - On early potatoes at Rising Sun and Bridgeville. (Milliron).

COLORADO POTATO BEETLE (Leptinotarsa decemlineata) - DELAWARE - Adults feeding on early potatoes at Ellendale and Georgetown (Milliron). SO. CAROLINA - All stages moderately abundant in most potato plantings in Charleston area. Controls underway. (Cuthbert, Deen). ALABAMA - Unusually abundant. (Arant).

GREEN PEACH APHID (Myzus persicae) - NORTH CAROLINA - Infesting tobacco plant beds in Jackson. Infestations light to moderate in Northampton and Onslow Counties. (Scott). FLORIDA - Averaging 300 per tobacco plant at Greensboro, Gadsden County. One shade tobacco field heavily infested on April 22 now under control. (May).

A MOLE CRICKET - NORTH CAROLINA - Light to moderate infestations in tobacco plant beds in Jackson, Northampton and Onslow Counties. (Scott).

CABBAGE LOOPER (Trichoplusia ni) - FLORIDA - Averaging 1 to 200 larvae per acre of tobacco in Gadsden County. Control used. (Rhoades, May). Populations appear below normal in the Everglades area. (Genung, Questel).

A CATERPILLAR (probably Apantesis sp.) - FLORIDA - Averaging 1 to 100 per square foot, attacking tobacco at Jasper. (Andrews).

HORNWORMS (Protoparce spp.) - FLORIDA - Occasional eggs and early-instar larvae collected from flue-cured tobacco at Gainesville. This is first report of season. (Kuitert).

GRUBS (Probably Cotinis nitida)- NORTH CAROLINA-Light to moderate in tobacco plant beds in Hertford, Northampton and Onslow Counties. (Scott).

CRANE FLIES - NORTH CAROLINA - Moderate to light infestations of tobacco plant beds in Onslow County. (Allgood).

TOBACCO FLEA BEETLE (Epitrix hirtipennis) - NORTH CAROLINA - Light to moderate infestation in tobacco plant beds in Warren, Hertford, Onslow and Northampton Counties, severe infestation in Jones and Wilson Counties. (Scott).

FULLER ROSE BEETLE (Pantomorus godmani) - FLORIDA - Averaging 2 adults per plant of garden crops in Santa Rosa County. (McCall).

ASPARAGUS BEETLES (Crioceris spp.) - VIRGINIA - Both asparagus and spotted asparagus beetles present and ovipositing freely on asparagus spears in the eastern area. (Brubaker, Greenwood, Hofmaster).
DELAWARE - Few adults of C. duodecimpunctata at Smyrna. (Milliron).
NEW JERSEY - C. asparagi continues to infest plantings heavily. (Merrill).

CARROT WEEVIL (Listronotus oregonensis) - NEW JERSEY - Active on muck-grown celery. Worse in northern than southern counties. (Merrill).

APHIDS - INDIANA - Very few found on strawberries in Orleans area in comparison with those of recent years. (Marshall). SOUTH CAROLINA - Generally light on potatoes in Charleston area. Green peach aphid most abundant. (Cuthbert, Deen).

MITES - INDIANA - Very few found on strawberries in Vincennes area in comparison with those of recent years. (Marshall).
TEXAS - Medium to heavy widespread infestation of Erythraeus sp. reported on onions in Brazos Co. 4/15. (Davis, Gregg). According to available records, mites of this genus are known as predators usually.

STRAWBERRY WEEVIL (Anthonomus signatus) - DELAWARE - Noticeable injury at Thompsonville and Georgetown. (Milliron).

STRAWBERRY LEAF ROLLER (Ancylis comptana fragariae) - MICHIGAN - Abundant at Keeler, April 22. (Hutson). KANSAS - Few moths emerged in Wathena-Blair, Doniphan County, area by April 15. This is 10 to 15 days earlier than normal emergence dates for this area of the State. (Eshbaugh).

STRAWBERRY ROOT APHID (Aphis forbesi) - MICHIGAN - Abundant at Keeler, April 22. (Hutson).

STRAWBERRY APHID (Capitophorus fragaefolii) - CALIFORNIA - Still numerous in most strawberry fields in Orange and Los Angeles Counties. (Campbell).

SPITTLEBUGS - NORTH CAROLINA - A 5-10 percent infestation on strawberry in Wake County. (Jones). MARYLAND - Infesting strawberries in Baltimore County. (U. Md., Ent. Dept.)

A NITIDULID (Lobiopa insularis) - LOUISIANA - Increased activity over the entire strawberry belt. Up to 30 adults caught in trap. Up to 5 per ripe strawberry fruit in Tangipahoa Parish. (Oliver).

TWO-SPOTTED SPIDER MITE (Tetranychus bimaculatus) - CALIFORNIA - Populations on the increase in strawberry fields in Orange County. (Campbell).

THRIPS (Frankliniella sp.) - LOUISIANA - Infestations continue severe in strawberry blossoms, Tangipahoa Parish. (Oliver)

COTTON INSECTS

BOLL WEEVIL (Anthonomus grandis) - TEXAS - Populations increasing in entire valley area. As high as 8 percent punctured squares in a few early fields. (Wene, Dean, Fuller). One weevil found on 3200 linear feet of row or at rate of 5 per acre in fifteen fields in McLennan and Falls Counties. For corresponding week in 1954 weevils found at rate of 15 per acre in 27 fields. (Parenica et al). SOUTH CAROLINA - Total of 112 weevils active in 10 hibernation cages at Florence during March and 471 in April. This compares with 15 active in March and 32 in April 1954. (Walker et al).

BOLLWORMS - TEXAS - Infestations building up throughout the lower Rio Grande Valley area. One report shows 16 percent of plants infested in Rio Hondo area. Other areas have as much as 10 percent square damage. (Wene, Dean, Fuller).

COTTON FLEAHOPPER (Psallus seriatus) - TEXAS - Seasonal emergence from hibernation cages in Waco area to April 30 was 22,486. At this time in 1954, 1953, 1952, 1951 and 1950, totals of 3,965, 7,623, 10,647, 38 and 341, respectively, had emerged from cages which contained the same host plants collected from same location. (Parenchia et al).

BROWN COTTON LEAFWORM (Acontia dacia) - TEXAS - Eight per 50 linear feet of row on seedling cotton in Burleson County. One also collected on seedling cotton in Brazos County. (Lloyd).

PINK BOLLWORM (Pectinophora gossypiella) - TEXAS - A few collected from oldest cotton in Willacy County and in the Brownsville area. (Wene, Dean, Fuller).

SALT-MARSH CATERPILLAR and CUTWORMS - TEXAS - Widespread on cotton in Matagorda County. (Pfannstiel).

THRIPS - TEXAS - Light to medium infestations in Matagorda, Ft. Bend, Nueces, San Patricio, Calhoun, Dimmit, Maverick, Williamson Counties. (Hurta, Richardson, Zieschang, Abercrombie, Massey, Cook, Kelly, Cooper). Damaging numbers in a few fields of late-planted cotton in Willacy County. (Wene, Dean, Fuller). Of 15 fields inspected in McLennan and Falls Counties the following degrees of infestation found: 8 fields, none; 6 fields, light; 1 field, medium. (Parenchia et al).

LOUISIANA - Three adult Frankliniella fusca per seedling cotton plant in Tensas Parish. (Oliver). Thrips, mainly F. fusca, in many fields in Tallulah area, 6.4 adult thrips per 20 plants in 5 fields sampled. (Gaines et al). MISSISSIPPI - Appearing in seedling cotton in some fields in Washington County. (Merkl).

SPIDER MITES - TEXAS - Medium to heavy infestation in Calhoun, Ft. Bend and Nueces Counties. (Cook, Abercrombie, Cooper). Damage in a few fields in lower valley. (Wene, Dean, Fuller).

ARIZONA - Moderately severe damage on 40 acres cotton in Eloy area. (Ariz. Coop. Rept.)

APHIDS - TEXAS - Light to heavy infestations in Calhoun, Ft. Bend and Nueces Counties. (Cooper, Zieschang, Kelly, Massey). Increasing in Willacy County, but in remaining valley area about same or decreasing due to natural control. (Wene, Dean, Fuller).

LEAF MINERS - TEXAS - Numerous on cotton and may become serious in Winter Haven area. (Richardson).

SEED-CORN MAGGOT (Hylemya cilicrura) - ALABAMA - Infesting germinating cotton seed and destroying stands of cotton in Morgan County. (Arant).

A DARKLING BEETLE (Blapstinus sp.) - ARIZONA - Severe damage on 13 acres of cotton at Tucson. (Ariz. Coop. Rept.)

FOREST, ORNAMENTAL AND SHADE TREE INSECTS

CALIFORNIA OAKWORM (Phryganidia californica) - CALIFORNIA - Spring brood damaging oaks in Marin County. (Cal. Coop. Ins. Rept.).

SMALLER EUROPEAN ELM BARK BEETLE (Scolytus multistriatus) - KANSAS - Infested elms continue to be found in Riley, Clay, Morris and Wabaunsee Counties. (Matthew).

TENT CATERpillARS - OREGON - Malacosoma disstria and M. pluviale emerging in Willamette Valley April 25. (Roth).

FOREST TENT CATERpillAR (Malacosoma disstria) - MINNESOTA - About 50 percent hatched in Hinckley area and about 1 percent at Duluth. Problem expected to be largely confined to portions of Carlton, Pine and Chisago Counties. (Minn. Ins. Rept. Serv.).

EASTERN TENT CATERpillAR (Malacosoma americanum) - DELAWARE - Nests numerous over State on wild cherry, sweetgum and other trees. (Milliron). MARYLAND - Infestations heaviest in recent years, especially severe in Prince Georges and Montgomery Counties. (U. Md., Ent. Dept.). MICHIGAN - Abundant at Battle Creek, Lansing, Kalamazoo and South Haven. (Hutson).

AN APHID (Cinara tujaefilina) - NEW MEXICO - Causing considerable concern on arborvitae in some areas of the southern half of the State. (Dobson, Apr. 23).

SPIDER MITES (Tetranychus sp.) - ARKANSAS - Infestations general on nursery stock, heavy some instances. (Warren).

INSECTS AFFECTING MAN AND ANIMALS, ETC.

HORN FLY (Siphona irritans) - OKLAHOMA - From 300-400 per animal in southeast to 200 in northwest part of State. (Howell).
ARKANSAS - Active and about normal, 15-30 per animal in untreated herds. (Warren). KANSAS - On cattle in Hodgeman County, average of 30 flies per animal. (Gates).

A HORSE FLY (Tabanus carolinensis) - MISSOURI - Horse flies reported in CEIR 5(17): 366 have been identified as the above species. (Kyd, Thomas).

HOUSE FLIES - SOUTH CAROLINA - Some increase in widely-scattered areas. (Nettles).

MOSQUITOES - FLORIDA - Psorophora ciliata averaging 100 adults per animal at Milton, Santa Rosa County. Has been a nuisance to man, horses, and cattle. (McCall). MINNESOTA - Aedes spencerii began emerging about April 20; A. implicatus about April 24, A. excrucians just emerging. (Minn. Ins. Rept. Serv.).

COMMON CATTLE GRUB (Hypoderma lineatum) - FLORIDA - Active in the Everglades and on lower east coast near Lake Worth. (Genung, Questel).

AMERICAN DOG TICK (Dermacentor variabilis) - DELAWARE - Adults common along roadside and in wooded areas throughout State. (Milliron). MARYLAND - In Prince Georges and Frederick Counties. (U. Md., Ent. Dept.).

A BAT BUG (Cimex adjunctus) - RHODE ISLAND - Heavy infestation in a building in South Kingstown. (Mathewson).

CORRECTION: The record of A MANGE MITE in Clearfield County, Pennsylvania, in CEIR 5(12):255 has been found to be incorrect. (Pepper).

STORED PRODUCTS INSECTS

MEALWORMS - GEORGIA - Unusually abundant in bins in which seed corn had been stored at Fort Valley. (Snapp).

LIGHT TRAP COLLECTIONS

		Pseudal. unip.	Prod. ornith.	Perid. marg.	Agrotis ypsilon	Feltia subter.	Heliothis armig. vires.	Proto. quin. sex.
<u>TEXAS (County)</u>								
McLennan	4/23-29	87	25	34	6	11	5	
LA.								
Baton Rouge	4/13-29*	13	170	12	21	180	6 (1 sp.)	
Franklin	4/21-27	2	7	2	7	13	5	
St. Joseph	4/5-27	54	7	12	26	29	9	
Bunkie	4/20-25	6	15	1	10	2	2	
Tallulah	4/23-29*	77	149	60	290	28	11	1
MISS. (Counties)								
Coahoma	4/23-29	268	9	6	24	5	2	
Humphreys		57	57	7	64	16	7	
Oktibbeha		109	68	2	13	11	5	1
Pearl River		14	13	5	8	10	9	
Washington		183	36	12	45		4	
ALA.								
Auburn	4/23-29	9	32			3	6	
GA. (County)								
Tift	4/18-23	2					47	35
S. C. (County)								
Charleston	4/18-24	11			21	16	5	1
Oconee	4/24-30	17					1 sp.	
Florence	4/24-29						224	

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* Two traps at Baton Rouge. Three at Tallulah.

LIGHT TRAP COLLECTIONS (Continued)

		Pseudal. unip.	Prod. ornith.	Perid. marg.	Agrotis ypsilon subter.	Heliothis armig. vires.	Proto. quin. sex.
<u>ARKANSAS</u>							
Hope	4/22-28	35		7			
Stuttgart	4/21-27	7					
Van Buren	4/22-28	32		3			
Fayetteville	4/22-28	271		20		8	
<u>TENN. (Counties)</u>							
Shelby	4/21-27	125					15
Madison		84					24
Lawrence		136					12
Maury		224					20
Robertson		64					12
Cumberland		34					3
Knox		13					
Green		180		2			6
<u>MISSOURI</u>							
Steele	4/19-25	44		17			9
Columbia		78		5			
Stark City		336		7			1

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Other light trap collections of interest: TEXAS - McLennan County, Pectinophora gossypiella 3, A. malefida 13, LOUISIANA - Baton Rouge, Empoasca fabae 10, Eutheola rugiceps 11; St. Joseph, E. rugiceps 665; Bunkie, E. rugiceps 21; Tallulah, A. malefida 20; Laphygma exigua 22; Loxostege similalis 364; Udea rubigalis 91. MISSISSIPPI - Washington County, A. malefida 24; Diacrisia virginica 31; Caenurgina erechtea 192. ALABAMA - Auburn, Agrotis malefida 17. SOUTH CAROLINA - Charleston, Laphygma frugiperda 3. TENNESSEE - C. erechtea 258; Agonoderus lecontei 1974. MISSOURI - Protoleucania albilinea 36, webworms 140.

BENEFICIAL INSECTS

A PARASITE (Aphytis maculicornis) - CALIFORNIA - This introduced parasite is reported reducing the infestation of olive scale on privet hedges in Placer County. (Cal. Coop. Ins. Pest Rpt.)

LADY BEETLES - ILLINOIS - Adults still plentiful and highest average population is 44 per 100 sweeps in eastern area. (Petty et al).

RECENT INTERCEPTIONS AT PORTS OF ENTRY

Of interest recently was the interception of a living adult tingid, Stephanitis pyri (F.), on Pyracantha twigs in airplane baggage from Greece at New York, N.Y. (Burnham, Petfield.) This insect has been reported injurious to apple and pear in Southern Europe, the Near East and parts of the Soviet Union. Injury is due to the feeding of the nymphs and adults on the lower surfaces of the leaves, resulting in a loss of sap and a destruction of leaf tissue. In addition, proper respiration of the leaves is hindered by the coating of insect excreta that accumulates after insect feeding. Leaf drop and a reduction in the quality and yield of the fruit occurs. In addition to apple and pear a wide variety of plants are attacked, usually Rosaceae, but occasionally others, like currant and chestnut. Hawthorn is said to be the native host plant.

Observations on the bionomics of the insect in Italy indicate that the adults hibernate under fallen leaves or in cracks in the bark of hawthorn, start feeding in April, then migrate to apple and pear. Mating then occurs, oviposition beginning in 4 or 5 days. Eggs are deposited in tissue of lower surfaces of the leaves where injured patches appear. On hatching nymphs start feeding underneath leaves. Adults appear in May and June. A second generation develops in late July and a third in September. Considerable migration occurs with adults of the third generation returning to hawthorn prior to hibernation.

S. pyri has been intercepted on previous occasions on orange, persimmon and quince from Italy and Cotoneaster from Greece. It is not known to occur in the United States. (Compiled by - Plant Quarantine Branch).

MISCELLANEOUS

CLOVER MITE (Bryobia praetiosa) - KANSAS - Infestation in houses continues to be reported from most areas of the State. (Matthew).

MINNESOTA - Large numbers in many dwellings. (Minn. Ins. Rept. Serv.).

ADDITIONAL NOTES

SOUTH CAROLINA - ARMYWORM infesting small grains over 10 square mile area in Calhoun County, April 28. (Cain, Nettles).

MAINE - Rhopalosiphum fitchii eggs hatching on apple in Kennebec County April 25. (Boulanger). Stem mothers of Macrosiphum solanifolii on swamp rose found hatched in Aroostook County April 21. (Shands, Simpson, Wave).

VIRGINIA - PEA APHIDS and ALFALFA WEEVILS are still doing heavy damage to alfalfa in many counties. Pea aphid infestations are general all over the State, some unusually heavy. Natural enemies and disease are beginning to bring some pea aphid infestations under control. ALFALFA WEEVIL infestations have been found in several additional counties. The insect has been found in most of the counties bordering North Carolina from Halifax County east. Also, infestations have been found as far west as Amherst County in the central area. Infestation in southern counties light. (Grayson, Muka, Morris). STRAWBERRY LEAF ROLLER larvae are just starting to roll leaves in the Churchland area of Norfolk County. Infestations spotted and damage medium. (Hofmaster). EASTERN TENT CATERPILLAR infestations medium on wild cherry trees in the Norfolk area. (Hofmaster). SOUTHERN PINE BEETLES and IPS BEETLES heavily damaged a stand of red pines in Rappahannock County. (Muka and Morris). COLORADO POTATO BEETLE heavy on newly-set tomato plants in Northumberland County. (Saville). SEED-CORN MAGGOT destroying corn seedlings in Lunenburg County. (Morris). In the eastern area CABBAGE APHID numerous on remnants of overwintering crucifers, also larvae of DIAMONDBACK MOTH in fair numbers on these crops; a good many IMPORTED CABBAGE WORM larvae and well distributed infestations of TURNIP APHIDS on young cabbage plants; GREEN PEACH APHID light to moderate on spinach; newly-set tomato plants on Eastern Shore had to be treated to protect them from COLORADO POTATO BEETLES. (Brubaker, Greenwood, Hofmaster). TOBACCO FLEA BEETLE severely damaging tobacco plants in beds in Louisa County. Infestations scattered but spotty over County. (Lancaster).

First Reported Records of Season (By Areas)

ARMYWORM moths, April 21, Newark, Delaware; MEADOW SPITTLEBUG nymphs, April 26 and 27, New York; CODLING MOTH adults April 20, Delaware; OYSTERSHELL SCALE first crawling young, April 8-15, North Carolina; EUROPEAN RED MITE hatching April 27 and 30, New York; PEAR MIDGE adults April 20 and 23, New York; ORIENTAL FRUIT MOTH emerged in cage, Illinois; MEXICAN BEAN BEETLE adults

April 18, South Carolina; COLORADO POTATO BEETLE adults feeding, Delaware; HORNWORMS eggs and larvae, Florida; STRAWBERRY LEAF ROLLER moths, April 15, Kansas; TENT CATERPILLARS emerging April 25, Oregon; and APPLE GRAIN APHID hatching, April 25, Maine.

Weather continued:

Warm, south winds kept temperatures above normal most of the week in the central portions of the Country. Maximum temperatures were in the 90's on several days in Texas, and during the weekend exceeded the 80° level northward to the Dakotas. In the western portions of the Great Plains strong winds during frontal passages at the beginning and end of the period caused additional soil erosion.

Rains in the northwest during the first part of the week left many fields too wet to work, despite sunny weather after the 29th. Wet soil resulting from previous rain was also reported in some sections of the Midwest. Dry, sunny weather in the South favored rapid crop growth and outside activities, but soils were drying rapidly and moisture is becoming deficient in the South and Gulf Coastal Plains. (Summary Supplied by U. S. Weather Bureau).

Request for Survey on Cotton Stem Moth

Cotton stem moth (Platyedra vilella) was first recorded in the United States in 1951 when specimens were collected at Mineola, Long Island, New York. Principal host plants are reported to be hollyhock, cotton, marsh mallow and other mallows. In the United States, however, it has been recorded only from hollyhock. In 1953, light to very heavy infestations were found at 19 locations in New York, two in Connecticut, and two in Massachusetts. In 1954, infestations were found at 14 locations in New Jersey. Damage to hollyhocks has varied from slight to almost total destruction to fruiting portions, with stems being heavily damaged at times. Tests to determine susceptibility of cotton and okra to the cotton stem moth in this Country will be made this season by ARS personnel at Farmingdale, Long Island, New York. It is hoped that voluntary survey for this insect will continue and it would be appreciated if agricultural workers in states not known to be infested would collect specimens suspected of being this species. If identification facilities are not available locally, specimens may be sent to the Economic Insect Survey Section, Plant Pest Control Branch, ARS, U. S. Department of Agriculture, Washington 25, D. C. The plate on the opposite page will help to separate larvae and pupae of P. vilella from those of other similar species associated with malvaceous plants.

Structural Characters for Recognition of Cotton Stem Moth (*Platyedra vilella* (Zell.))

The following combination of characters will separate the larvae and pupae of *Platyedra vilella* (Zell.) from those of other species associated with hollyhock and other malvaceous plants. Treatment of the adult has been omitted because characters for ready recognition in the field are not known.

LARVA:

Head - with anterior puncture A_a between anterior setae A_1 and A_2 , near A_2 .

Prothorax (TI) - with 3 setae on the prespiracular shield.

Abdominal proleg-bearing segments (A_3-6) - with seta iv approximate to seta v, both on same pinaculum.

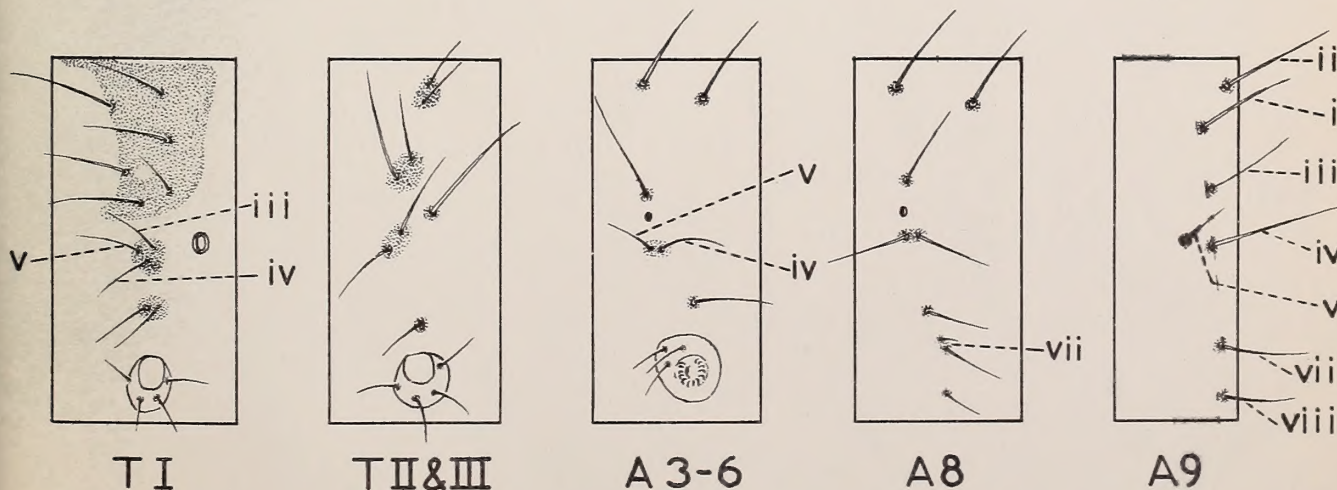
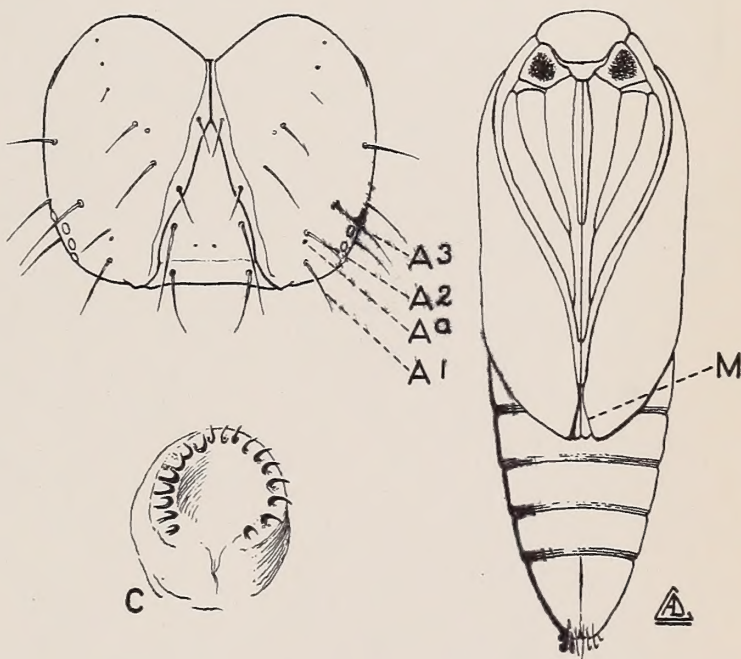
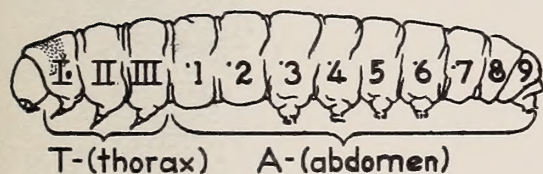
Eighth abdominal segment (A_8) - with group vii composed of 2 setae.

Ninth abdominal segment (A_9) - with seta iii more slender than setae i or ii; seta vi absent.

Crochets (C) - on abdominal prolegs (A_3-6) uniordinal in length, arranged in a penellipse.

PUPA: clothed with short, fine, pubescent-like hairs; anterior margins of fore wings (M) contiguous at a point near end of labial palpi, from which they are divergent (never parallel) to apices of wings. Length 8 to 10 mm.

H. W. Capps



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